

Work Order ID 82861

82861

Page 1

April-10-12 2:33:25 PM

Item ID: D205-634-141

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/04/10 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
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D2580-047	(DEO) revE
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100

0.00

100

DOCUMENT CONTROL

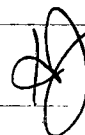
DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-141 CHG003

N/A 

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Required Date: 24/04/2012 Req'd Qty: 1.00 ***1***

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Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Inspect mat'l D2500-1-190 for damage

2-Cut D2500-1-190 per Dwg D2580 if necessary Debur ends

3-Drill pilot holes using DT8149, drill #30 hole (3.630 REF) using DT8149 and SPOT drill #30 (5.338 & 5.985 REF) using DT8149. Open holes to finished size except for (4) AFT spot drilled holes as per dwg D2580 sheet 7.

4-Drill pilot holes using drill jig DT 8149 and open holes to finish size

5-Acid etch and Alodine tube per QSI 005 4.1

6- Install web as per dwg using sikaflex

A/R Sikaflex Batch #: 122443

Handwritten notes and signatures:

 12-8-28
 7/6 12-8-28
 12/08/28

120

0.00

120

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT 16

2-Cut tubes as per Dwg. D2580

3- Scribe batch# in aft end of tube

Handwritten notes:
 CF 12-8-29

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Required Date: 24/04/2012 Req'd Qty: 1.00

1

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Skidtubes	0.00							
130									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr ends after cutting and remove bending marks. Prepare tube for welding D2576-3 step remove alodine as required.								
	2-Locating from most fwd saddle hole, drill most fwd wearplate hole using DT9793 (10.832 REF) as per dwg D2580 sheet 7.								
	3-Open run-on wearplate holes to finished size at locations (5.338/ 5.985/ 10.832 REF) as per dwg D2580 sheet 7.								
	4-Drill pilot holes for aft cap using DT8215, Open to finished size.								
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.00							
Quality Control									

CF 12-8-29

1 12-08-29



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Revision ID:

Item Name: Replacement Skidtube

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Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Skidtubes	0.00							
150									
Skidtubes	Memo	0.00							
Skidtubes	1-Weld step D2576 as per Dwg. D2580 and QSI004 A/R Aluminum Rod								
	2-Touch up alodine on run on wearplate holes prior to swaging								
	3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and as per dwg								
160	QC10- Inspect visual per QSI004- ground welds	0.00							
160									
QC	Memo	0.00							
Quality Control									
170	QC5- Inspect part completeness to step on W/O	0.00							
170									
QC	Memo	0.00							
Quality Control									

M122399

BE 12/08/29

DC 12/08/29

Drill Fow sing hole

DAS 16 12/08/30

DAS 16 12/08/30

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NS2

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Pressure Wash per QSI005 4.3	0.00							
180									
HandFinish	Memo	0.00							
Hand Finishing	And realodine tube as per QSI 005								
190	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
190									
Powdercoat	Memo								
Powder Coating									
	START TIME: 11:45	0.00							
	OVEN TEMPERATURE: 320°F								
	FINISH TIME: 12:15								
200	QC3- Inspect Part Finish	0.00							
200									
QC	Memo	0.00							
Quality Control									

1 mty/28 12830

1X Ø m/f 12/08/30

11:45
320°F
12:15

1 & (2P) 12/08/31

W121841

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	Assemble as per dwg	0.00							
210	HandFinishing					1	2	20	12/08/31
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 <u>122443</u> Sikaflex expire date: <u>13/03</u>								
	2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594								
	3- Install aft cap as per dwg								
	4- Wing walk as per dwg Batch# <u>122320</u>								
220	QC5- Inspect part completeness to step on W/O	0.00							
220									
QC	Memo	0.00							
Quality Control	Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024								

DAS
16
2-8-

12/09/04

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 10/04/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	Packaging	0.00							
230									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD205-634-141								
	Location: _____								
	PPP Rev: _____								
240	QC21- Final Inspection - Work Order Release	0.00							
240									
QC	Memo	0.00							
Quality Control									

PPP 82855

12/9/12

1120911

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Page 1

Work Order ID: 82861

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Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA 11.09.14 new issue EC verified by:DD
12.01.23 AS PER ECN11-684 DD VERF:EC

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-190 *D2500-1-190* Ext'n - 'I' Beam Tube 4"		Manufactured	No			110	Each	100.0000	1	1		12-8-28	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				HALL				100					
				74777				20					
				80061				80					
D2596 *D2596* Web, 205 Skidtube		Manufactured	No			110	Each	10.0000	1	1		12/08/28	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				10					
				80185				2					
				80820				1					
				81847				1					
				81848				4					
				82323				2					
D4202-1 *D4202-1* Spacer		Manufactured	No			150	Each	290.0000	24	24		12/08/29	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				5					
				77727				5					
				LG002				285					
				78806				6					
				79810				279					

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 82861

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Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN4-45A

Purchased

No

210

Each

114.0000

8

8

AN4-45A

Bolt

**

8

20

12/08/31

Location

Loc Qty

Loc Code

ST350A

121444✓

114

118926

64

121162

50

D2570

Manufactured

No

210

Each

125.0000

16

16

D2570

Bushing

**

16

20

12/08/31

Location

Loc Qty

Loc Code

ST011

88781✓

125

72960

41

78586

9

78587

42

79493

33

D4406-041

Manufactured

No

210

Each

2.0000

1

1

D4406-041

Fwd Wearplate Assembly

**

1

20

12/08/31

Location

Loc Qty

Loc Code

Return2012

2

74147

2

82882✓

210

Each

5.0000

1

1

D4406-043

Manufactured

No

D4406-043

Aft Wearplate Assembly

**

1

20

12/08/31

Location

Loc Qty

Loc Code

FP001

82886✓

3

80757

3

Return2012

2

74148

2

April-10-12 2:33:29 PM

Shop Packet Print

Page 2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21042-4

Purchased

No

210

Each

1,137.000

8

8

MS21042-4

USE MS21042L4

**

8 29 12/08/31

Location

Loc Qty

Loc Code

ST299

122452✓

1137

100743

9

119124

1000

5461

3

6844

19

7690

24

8182

70

9063

8

9229

4

D2576-3

Manufactured

No

150

Each

35.0000

1

1

D2576-3

Step (maching detail)

**

BE 12/08/29
B 82257 1

Location

Loc Qty

Loc Code

LG

35

74136

35

D2855

Manufactured

No

210

Each

41.0000

1

1

D2855

Cap

**

1 29 12/08/31

Location

Loc Qty

Loc Code

FP002

84952✓

41

65519

2

73347

29

75074

10

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Parent Item Name: Replacement Skidtube

82861

D205-634-141

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3-5A	Purchased	No	210	Each	1,536.000	2	2	
					**	2	2	12/08/31
AN3-5A								
Bolt								

Location	Loc Qty	Loc Code
ST350	1536	
115371	46	
117423	124	
118626	166	
119355	200	
120187 ✓	500	
121185	500	

AN960JD10L	*AS1149D0332J ✓	Purchased	No	210	Each	0.0000	2	2	
					**	2	2	12/08/31	
*AN960JD10L *									
Washer									

D2594-3	Manufactured	No	210	Each	2,674.000	8	8	
					**	8	8	12/08/31
D2594-3								
O-Ring, 205 Skidtube								

Location	Loc Qty	Loc Code
FP001	2674	
65518	41	
79496	984	
79573	50	
79755 ✓	1599	

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Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2594-1

Manufactured No

210

Each

567.0000

8

8

D2594-1

Plug, 205 Skidtube

**

9

12/08/31

Location

Loc Qty

Loc Code

FP001

85454✓

322

73401

30

74442

34

79495

258

FP-A

245

73401

0

78590

245

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LIST OF MATERIALS					DESCRIPTION
ITEM	QTY -041	QTY -045	QTY -047	PART NUMBER	
1	X			D2580-041	SKIDTUBE ASSEMBLY
2		X		D2580-045	SKIDTUBE ASSEMBLY
3			X	D2580-047	SKIDTUBE ASSEMBLY
4	1	1	1	D2500-1-190	EXTRUSION
5			16	D2570	BUSHING
6	1	1	1	D2576-3	STEP
7	20	24	25	D2579	SPACER
8	16	16	8	D2594-1	PLUG
9	16	16	8	D2594-3	O-RING
10	1	1	1	D2596	205 WEB
11	1	1	1	D2855	AFT CAP
12	1	1		D3564-5	WEARSHOE
13	1	1		D3564-9	WEARSHOE
14	1	1		D3564-11	WEARSHOE
15	1	1		D3564-13	WEARSHOE
16	2	2		D3566-1	GASKET
17	1	1		D3566-5	GASKET
18	1	1		D3566-13	GASKET
19			1	D4406-041	WEARPLATE ASSEMBLY
20			1	D4406-043	WEARPLATE ASSEMBLY
21	50	50		ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
22	50	50		AN3C4A	BOLT
23	2	2	2	AN3-5A	BOLT
24			8	AN4-45A	BOLT
25	50	50		NAS1149C0332R	WASHER (AN960C10L)
26	2	2	2	NAS1149D0332J	WASHER (AN960JD10L)
27			8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ASSEMBLY (-041/-047) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT ASSEMBLY (-045) GREEN SANDEX (REF 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 34.5 lbs
D2580-045 = 34.5 lbs
D2580-047 = 37.7 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/291.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

DEO ATTACHED

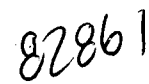
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2011-08-29

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WORK ORDER

NO. 82861 MLJ

12/04/10

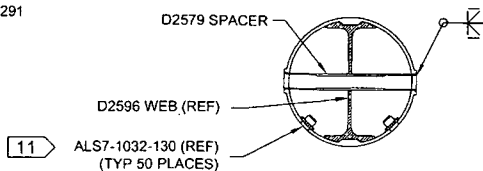
E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	PH	07.04.05
C	REDRAWN, INCLUDED DEO 9094/9097	CP	98.08.26
B	AS MANUFACTURED	DS	96.12.02
A	NEW ISSUE	DS	96.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AP	DRAWING NO.	REV. E
MFG. APPR.	DS	D2580	SHEET 1 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	205 SKIDTUBE ASSEMBLY	NTS
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RELEASE
2011-08-29

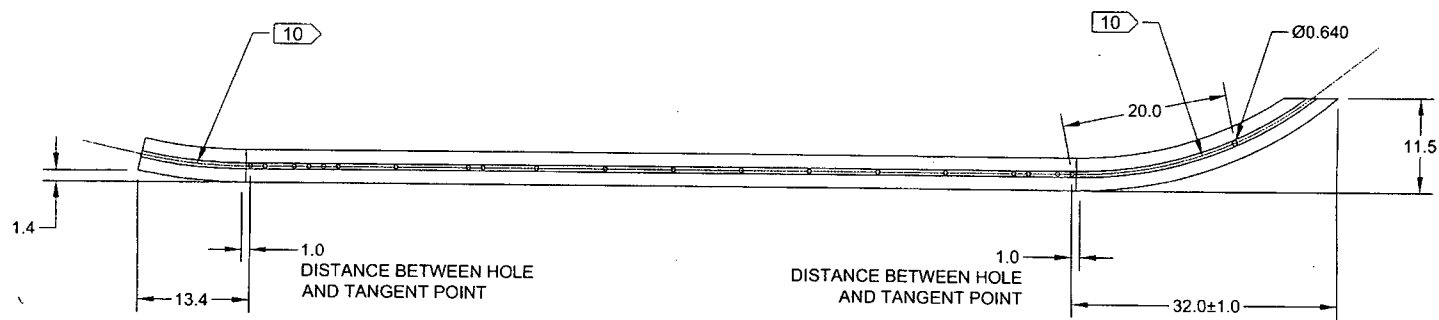
DETAIL C D3-2
SCALE 5X



-
- Diagram illustrating the grinding locations for the D2576-3 propeller. The diagram shows a cross-section of the propeller with the following labels:
- GRIND FLUSH 4 PL
 - GRIND FLUSH
 - D2576-3 STEP
 - GRIND FLUSH
 - LOCATION RIDGE ON UNDERSIDE OF D2576-3
 - $\frac{1}{4}$

DESIGN	#	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 2 OF 6
APPROVED	10	TITLE	SCALE
DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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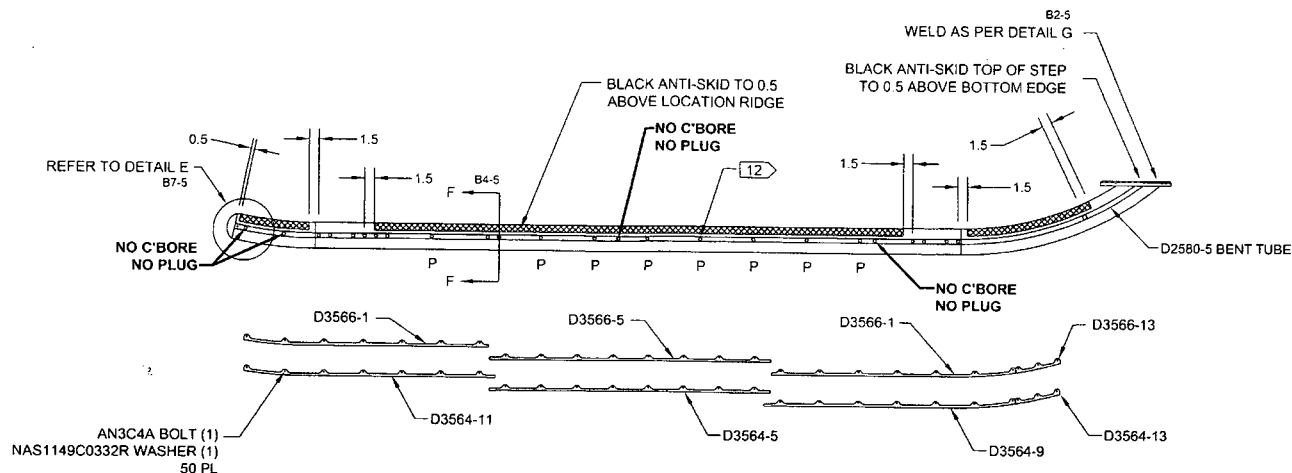
D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

DEO ATTACHED

RELEASED
2011-08-28
JW

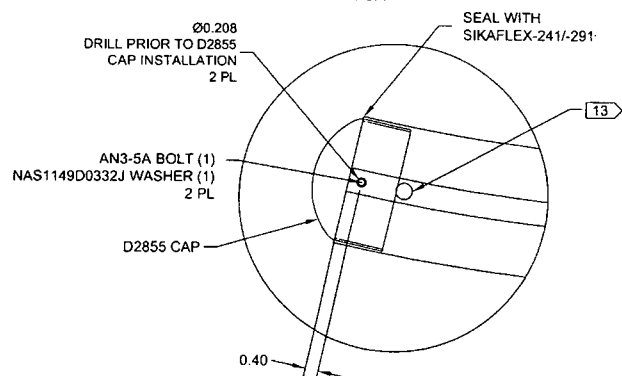
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 3 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	140	205 SKIDTUBE ASSEMBLY	NTS
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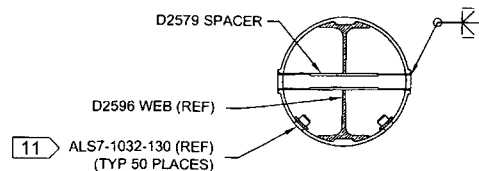


D2580-045 ASSEMBLY DETAIL

DETAIL E D7-5
SCALE 5X

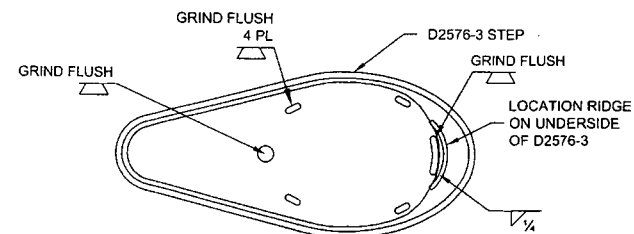


SECTION F-F D5-5
SCALE 5X



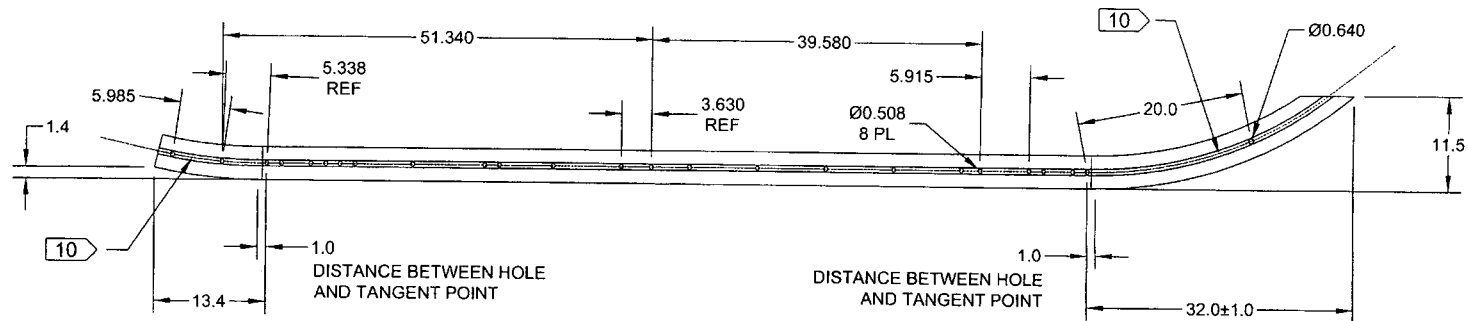
- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
 2. INSERT D2579 SPACER (24 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

DETAIL G D3-5
SCALE 5X



DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 4 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	140	205 SKIDTUBE ASSEMBLY	NTS
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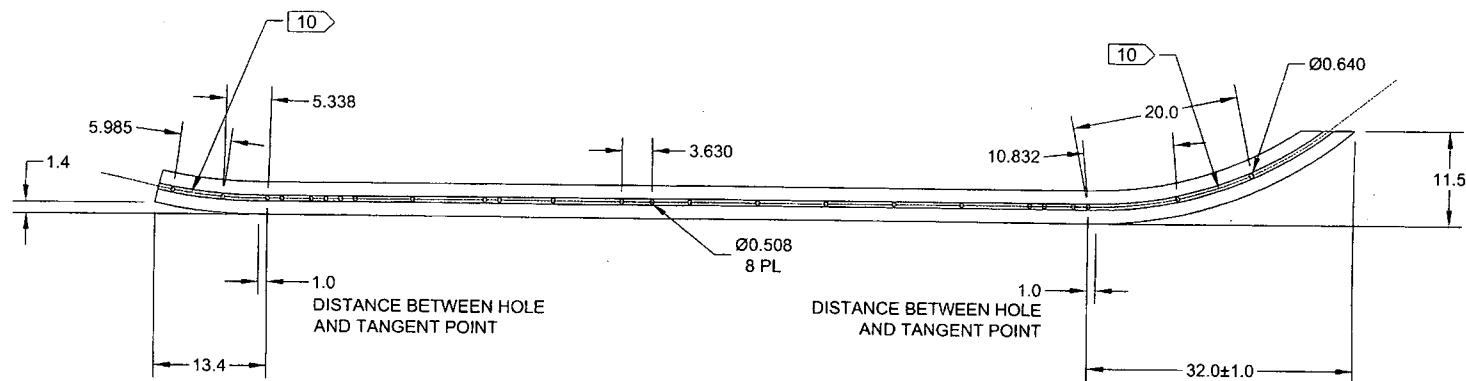
D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

DEO ATTACHED

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2011-08-29
ND

DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 5 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	#	205 SKIDTUBE ASSEMBLY	NTS
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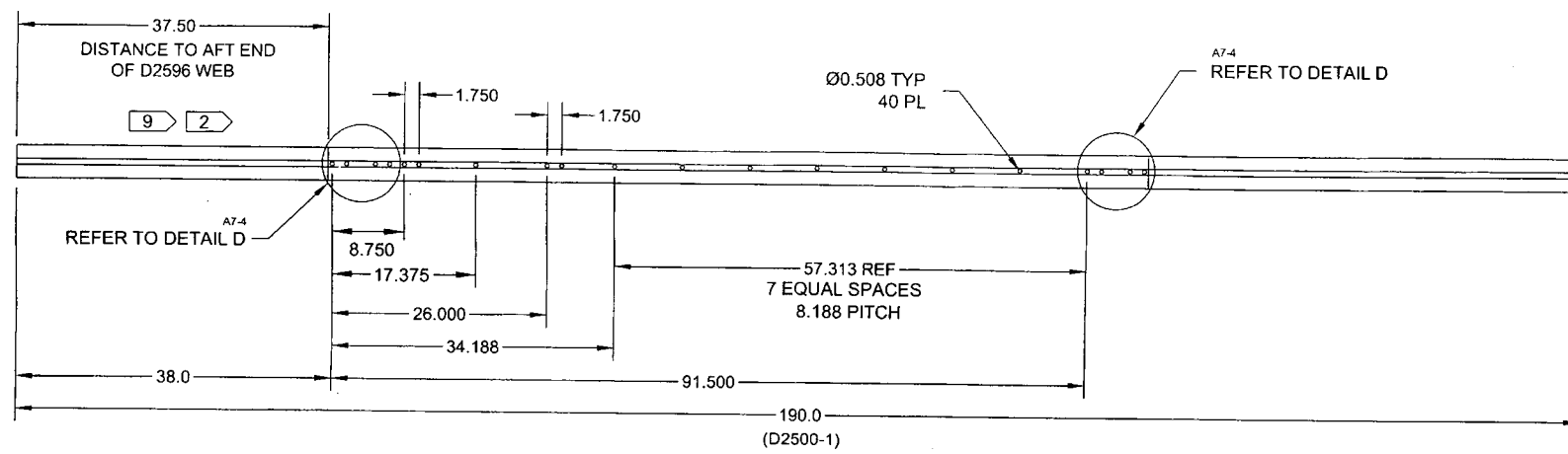
D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)



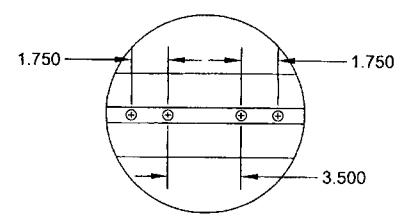
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2011-08-29

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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 7 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	140	205 SKIDTUBE ASSEMBLY	NTS
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D2580-101 TUBE



DETAIL D D3-4
SCALE 5X C7-4

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R 2011-08-29

DESIGN	#	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 8 OF 8
APPROVED	10	TITLE	SCALE
DE APPR.	#	205 SKIDTUBE ASSEMBLY	NTS
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DRAWING NO. D2580	TITLE 205 SKIDTUBE ASSEMBLY	REV. E	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D2580-E-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>ASS</i>	MFG. APPR. <i>ER</i>	APPROVED <i>HA</i>	DE APPR. <i>HA</i>		
DATE 11.12.13	DATE 11.12.13	DATE 11.12.13	DATE 11.12.13	DATE 11.12.13		

PURPOSE:

CHANGE ALL C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

WAS

QTY	QTY	QTY	PART NUMBER	DESCRIPTION
-041	-045	-047		
20	24	25	D2579	CROSS BOLT SPACER

IS

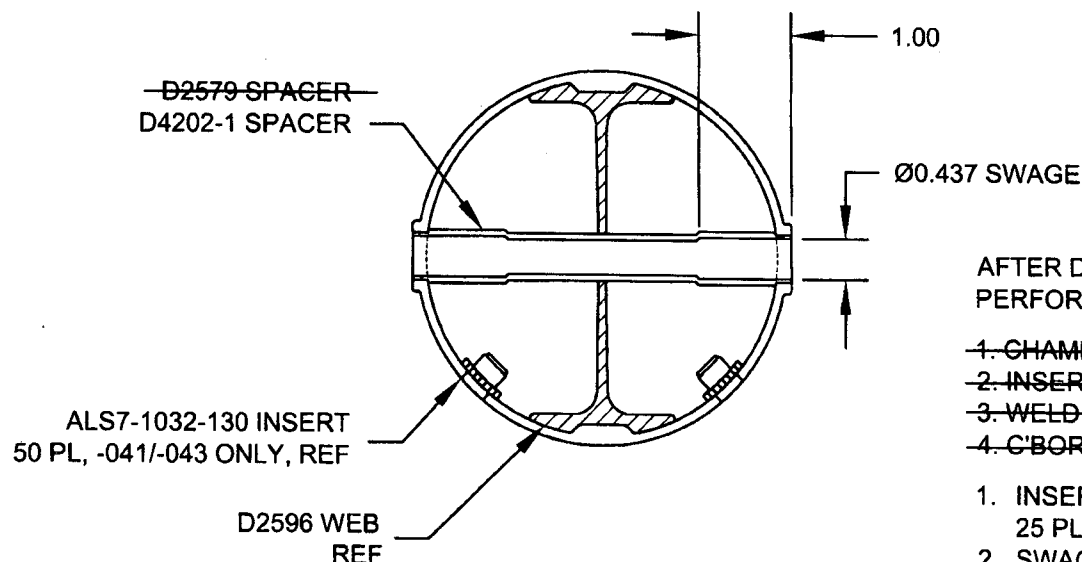
	4		* D2579	CROSS BOLT SPACER
20	20	25	D4202-1	SPACER

SECTION B-B, SECTION F-F, & SECTION I-I ARE AMENDED AS FOLLOWS
FOR ALL HOLES THAT WERE ORIGINALLY C'BORED:

*** FOR -045 SKIDTUBE ONLY:**

WELD 4X D2579 SPACERS PER DWG
IN LOCATIONS MARKED "NO C'BORE".
REF SHEET 4 OF DWG.

RELEASED
2011-12-14



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.060 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

1. INSERT D4202-1 SPACER, 20 PL (-041) OR 20 PL (-045) OR 25 PL (-047)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

SECTION B-B, F-F, I-I
NOT TO SCALE